Innovative Sulfide Removal Technology for Wastewater Treatment

Industry Need:

Sulfur compounds in wastewater are highly corrosive and can lead to the production of offensive odors. Current methods for sulfide removal are inefficient for wastewater with a high solids content or can inhibit methane production in anaerobic digesters.

Solution:

An economical method to remove sulfide compounds from wastewater without disturbing methanogenesis and generating compounds with no economic value.
Markets Addressed

• Wastewater treatment
  – Agricultural
  – Industrial
  – Municipal
Competition and Risk

• Competing approaches include:
  – Chemical treatment (e.g., oxidation, ozonation, chlorine)
  – Physical (e.g., metal oxides and absorbants)
  – Biological (metabolic oxidation to elemental sulfur)

• Technology risk
  – Commercial level scale up
Status

• Development Stage:
  – Shown to reduce sulfur compounds to concentrations as low as 1 ppmV

• Intellectual Property Status:
  – ISURF #3205

Contact Information:
Craig Forney
ceforney@iastate.edu  
515-294-9513
http://www.techtransfer.iastate.edu